

AMERICAN JOURNAL OF EDUCATION

UNIVERSAL EDUCATION—THE SAFETY OF A REPUBLIC.

VOL. VIII.

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No. 12.

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WHO KNOWS?

Who knows as he treads
O'er the blue-violet beds,
And as he looks down
Sees that pit in the ground,
Who knows of the dead
That lie in this bed?
Who knows?

Who knows the sore woe,
The anguish, the throe,
The low groans that dart
A chill to each heart,
Who knows the deep cry
Of the strong when they die?
Who knows?

But sadder than all,
Than e'en the death-thrall
Is that on the stone,
That carved word "Unknown."
Who knows why they fell,
Fighting, battling so well?
Who knows?

God knows; He doth well.
In His mercy they fell.
Ah! happy their lot.
Who envies them not?
They are resting at last,
Life's marches all past.
God knows.

God knows. And He sends
The sunlight that blends
With the whispering leaves,
And a canopy weaves
Of bright green and gold
O'er the brave and the bold.
God knows.

A. M. O.

THE school that is frequently compelled to have its teachers changed is concededly in a condition of chronic decay.



J. B. MERWIN EDITOR.

ST. LOUIS, DECEMBER, 1875.

TERMS:

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WE close Volume 8 with this issue. Our next number will be dated January, 1876. To our ever widening circle of friends, readers and helpers, we tender the congratulations of a "merry Christmas" and a "happy New Year," and for ourselves we are determined to work more vigorously and faithfully for the redemption and salvation of our country from the mighty thrall of ignorance, vice, and crime, which to-day shuts *nine million five hundred thousand* children out of school.

Who shall dare stand as prophet, and say what will be the result when *nine million five hundred thousand* ignorant voters elect rulers and levy taxes in this country?

Will the Christmas be "merry," and, under this *regime*, the "New Year" "happy"?

Is there not an urgent demand for earnest, united, vigorous work?

POWERFUL GROWTH.

WE gather and group the following facts from the new report of the United States Commissioner of Education, Gen. John Eaton:

The increase in the number of the school population in 1874 is over 400,000; of the teachers, over 24,000; of the school income, over \$1,200,000. There is powerful growth, worthy of our great republic, yet not as powerful as it should be in all the States.

The average number of school days per pupil, furnished by New Jersey, is 192; by Maryland, 188; by Rhode Island, 179; by New York, 175; by Connecticut, 174; by Massachusetts, 168; by Pennsylvania, 148; by Ohio,

145; by Delaware, 146; by Illinois, 142; by Michigan, 140.

Now, from the lowest if we come upward, among those whose number of days is given, North Carolina averages 50 days per pupil; Georgia, 75; Nebraska, 81; South Carolina, 100; New Hampshire, 100.

In view of the area, the mountains, the sparse population, the previous hindrances, and present state of funds or industrial affairs, the latter States have done nobly, and will do much better in the next ten years.

The number in daily attendance averages over 4,500,000, which shows the magnitude of our school interest, and the power of its operation in a way to encourage the patriot's heart throughout the land. But the work yet to be done is still greater, for the whole number of proper age for school attendance is now 14,000,000, which shows about 9,500,000 *out of school*, who ought to be in it.

Some 250,000 teachers are now employed at salaries (of males) from \$30 per month to \$94; (of females) from \$16 to \$55.

The total expenditure reported was almost \$75,000,000. Income, over \$82,000,000. Valuation of all the school property, nearly \$166,000,000. These are items which prove a powerful growth, and which may well serve to encourage the friends of popular education, as well to terrify its boldest assailant. May God Almighty—the Father of lights—strengthen our schools yet sevenfold.

—During 1876 the great battle will be fought which will determine the fate of popular education in this State, at least for many years. Let those who favor the education of all be united, vigilant, and determined, and a great victory for human progress is certain.

One person, connected officially in a slight way with education, sends us over seventy names of teachers and school officers as subscribers to this journal, at one time. He says in his letter: "Your journal contains a vast amount of just such information as the people need to know. We do not get this information in either the

religious or the political papers, and when I called attention to these articles, I found no difficulty in securing the list of names, and the money to pay the subscription for a year."

SEVERAL County Superintendents close up the year by sending us the names of *every teacher in the county*, as subscribers to this journal.

Of course this will make an intelligent constituency of the people, and when there is this mutual understanding and interest the schools prosper, and steady progress is made, and the money to sustain the schools comes easy.

WE should like to give away, during 1876, *one thousand* of "Webster's Unabridged Dictionaries,"—price \$12.00.

We send it to *all*, *without cost*, (except for express charges) who send us eighteen subscribers to this journal.

Who will order the first one? Any teacher or county superintendent can secure this invaluable work with little effort. It is worth the trial.

The suggestions of Honorable Leon Trousdale, State Superintendent of Tennessee, to the county superintendents, we hope will be adopted generally in other States.

The people who pay the taxes to sustain the schools, ought to know what our teachers and school officers are doing, and what the schools cost, and the relative cost, too, of public and private schools.

REDUCED rates of fare on the railroad have been secured to those attending the Missouri State Teachers' Association, to be held in Mexico, Mo., Dec. 28, 29, and 30, 1875.

THE best teachers, even, cannot at once make their mark on a disordered school. They should be given a proper time for their work to prove itself. But there should be no mincing matters with the incompetents. They have no claim upon the trustees and local committees of the State any more than the bookkeeper or the clerk, who has mistaken his vocation, has upon his employer.

THE KINDERGARTEN.

AN ADDRESS, delivered before the Normal Teachers' Association, at St. Louis, Mo.

BY MISS S. E. BLOW.

IT is a truth now universally recognized by educators, that ideas are formed in the mind of a child by abstraction and generalization from the facts revealed to him through the senses; that only what he himself has perceived of the visible and tangible properties of things, can serve as the basis of thought, and that upon the vividness and completeness of the impressions made upon him by external objects, will depend the clearness of his inferences and the correctness of his judgments. It is equally true, and as generally recognized, that in young children the perceptive faculties are relatively stronger than at any later period, and that while the understanding and reason still sleep, the sensitive mind is receiving those sharp impressions of external things, which, held fast by memory, transformed by the imagination, and finally classified and organized through reflection, result in the determination of thought and the formation of character.

These two parallel truths indicate clearly that the first duty of the educator is to aid the perceptive faculties in their work, by supplying the external objects best calculated to serve as the basis of normal conceptions, by exhibiting these objects from many different stand-points, that variety of interest may sharpen and intensify the impressions they make upon the mind, and by presenting them in such a sequence that the transition from one object to another may be made as easy as possible.

The advocates of the Kindergarten believe that Froebel has met this fundamental necessity in education better than any other thinker, and that the series of objects technically called Froebel's Gifts, offer the healthiest nourishment yet discovered for the child's mind, and constitute the best basis yet known for strong and harmonious development of the intellectual powers. It is my purpose to-day to describe these gifts briefly, in the order of their succession; to indicate their connection, and to try to make clear the law by which their sequence is determined. Recognizing clearly the necessity of a definite starting-point for thought, Froebel presents to the child in his first gift a ball, an object containing, under the simplest form, the properties common to all things. By means of the ball, we illustrate the general properties



FIRST GIFT.

of size, color, form, weight, and density, while at the same time we give

the child the easiest thing in the world to grasp alike with the hand and the mind. It is the simplest of forms, for it has neither sides, corners, nor edges. It is easy to conceive as a whole, for in all positions it appears the same. It is the fundamental form throughout nature, and is constantly appearing both in the organic and inorganic worlds, and, finally, it is perfectly harmonious, being, one might almost say, the ideal form towards which the universe strives. To the child, moreover, the ball is the source of infinitely varied amusement. He rolls it, he tosses it, he whirls it round and round. Holding it by a string, he moves it up and down, right and left, round in an ever-widening or an ever-narrowing circle. It becomes to him the representative of a thousand things; through its form it stands for the fruits and flowers he has learned to love; through the motions he gives it, it becomes to him the springing cat, the flying bird, the climbing squirrel—all the objects with which his little experience in life has made him familiar, are embodied in it, and just from its great simplicity result its manifold adaptations.

As introduced into the Kindergarten, the first gift consists of a box containing six soft worsted balls of the different primary and secondary colors. These balls should be so used that the child will learn through actual experience all their essential characteristics, both in rest and in motion, in their relation to each other and in their relation to himself.

The second gift, which consists of a hard ball, a cube, and a cylinder, involves at its basis recognition of the truth that in

order to clear knowledge there must be comparison, or, in other words, that we only learn what a thing *is* by learning what it *is not*. Therefore, to complete the child's knowledge of the ball, he must compare it with something else, and as his powers are too weak to discern slight divergences, he needs an object which presents to it the completest possible contrast. This we find in the cube. Instead of the unity of the ball, we have in the cube variety; instead of the simplicity of the ball, we have in the cube complexity; instead of the unvarying uniformity of the ball, we have in the cube an object which changes with every modification of position, and every acceleration of movement—instead of the ready movability of the ball, we have in the cube an object which, as it were, embodies the tendency to repose.

The cylinder forms the connecting link between the ball and the cube. Like the ball, it is round and without corners, and like the cube, it has sides and edges. It contains the ball, and is contained by the cube, and it

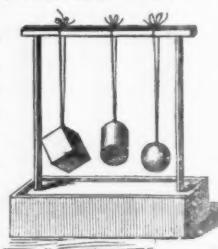
unites the movability of the one with the fixedness of the other.

In the third gift, which consists of a cube divided once in every direction, giving 8 smaller cubes,



THIRD GIFT.

we pass from contrasts of form to contrasts of size. This gift, considered as a whole, is identical with the cube of the second gift, but through its divisions it enables the child to grasp inner conditions as well as external appearance, leads from the conception of a simple unit to the elements of which such unit is composed, thus paving the way for rational analysis. And as every analysis should end in a synthesis, every division of the cube into its parts is followed either by their recombination into the original whole, or by the production of a new whole, of which each small cube is again an essential part. Thus the third gift meets the instinctive craving of the child to find out what is inside of things, and at the same time, through the number and variety of its possible transformations, it satisfies and stimulates the creative powers. This gift is also excellently adapted to give children definite ideas of number, and only those who have seen the little calculators making all possible combinations of their eight cubes, can understand how the experiences thus obtained will simplify arithmetic, and make it a pleasure instead of a torture, alike to teacher and pupil.

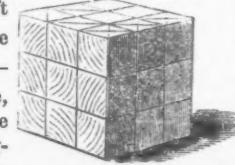


SECOND GIFT.

The fourth gift, like the third, is a divided cube, but in its subdivision we have blocks, whose sides are oblongs instead of squares. And whereas, in the small cubes of the third gift, the length, breadth and thickness were equal, the parallelopipeds of the fourth gift are twice as long as they are broad, and twice as broad as they are thick. Thus the three dimensions of space implied in the third gift are emphasized in the fourth, and all the possibilities latent in the former are actualized in the latter.

As all development moves from the simple to the complex, and as in the child what is new unfolds from the old, so in the Kindergarten gifts which are intended to be an objective counterpart of this subjective process, we find each new gift contains all that existed in the previous gifts, with the addition of elements which they implied, but did not realize. Thus in the fifth gift we again see the cube—this time, however, the cube is larger, the number of its parts is greatly increased, and by dividing some of the smaller cubes the triangular form is introduced. A greatly increased amount

FIFTH GIFT.



FIFTH GIFT.

of the child, and alike in extended numerical relations, in variety of fundamental forms, and in adaptability to creative purposes, this gift is an advance upon its predecessors.

With the sixth gift,

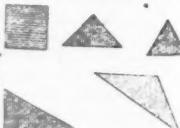


SIXTH GIFT.

which is a cube of the same size as the fifth, but differs in its subdivisions, we complete the series of solid forms.

To understand these gifts we must clearly and definitely apprehend their relation to each other, for it is this relation which gives them their significance, and upon the recognition of this relation depends the power with which they are used. We conceive nothing truly so long as we conceive it alone. It is only when the relations of any individual object to universal law are rightly apprehended, that a clear insight into its nature is gained. Now the universal law of development is progress from the unlimited to the limited, from the homogeneous to the heterogeneous, from simplicity, with its manifold adaptations, to complexity, with its defined parts and restricted powers. Illustrations of this law are all around us. It is written on all inorganic nature; it unfolds itself yet more clearly in the plants and animals. Man, too, is no exception to it, but physically, mentally, and morally progresses under the conditions which it imposes. Clearly the law of human development should be the law of education, and the great originality of Froebel as a thinker consists in his recognition and application of this vital truth. It was this underlying thought which determined in his mind the sequence of the six gifts just described, and any person who will carefully study them, will find that there is in them a gradual advance in definiteness and complexity, and that each successive gift limits the freedom of the child, while vastly increasing his power within the boundaries defined.

Education, however, must move not only from the simple to the complex, but from the concrete to the abstract. Hence in Froebel's seventh gift we pass from the solid to the surface, and give to the child first squares, and then the different kinds of triangles. To preserve the connection of the gifts and to derive the surface, as logically it must be derived from the solid, the square is represented as the embodied side of the cube. The right-angled isosceles triangle is



SEVENTH GIFT.

then derived from the square by the diagonal line, and with this triangle as the standard of comparison, the other triangles are also illustrated and defined.

The interlacing slats of the eighth



EIGHTH GIFT.

gift form the transition from the surface to the line. These slats rudely represent the line, while, by breadth, they are still connected with the surface. They are succeeded by the



NINTH GIFT.

sticks and wires which visibly embody the line, and through which the child learns to conceive the line as the boundary of a surface, just as he previously conceived the surface as the boundary of a solid. The limit of analysis is reached when we move from the line to the point, and in Germany there has recently been introduced into some of the Kindergartens the occupation of sorting, arranging and combining into different forms, small pebbles or shells, which are intended to represent the embodiment of the point. The sorting of seeds for the gardens also come under this head, and with these crude material representations of the point is completed the series of the Kindergarten gifts.

I trust, from what has been said that the following points with regard to these gifts have been clear:

1. That the method of procedure by which the successive links in the series are obtained, is strictly analytical.

Thus, by analysis of the solid we obtain the surface, by analysis of the surface the line, by analysis of the line the point.

2. That in using these gifts the child effects no transformation of material—he neither adds to, diminishes, nor modifies what is given him, but simply classifies, combines, and arranges the elements he receives.

We pass, now, from the Kindergarten occupations, and, before I attempt to explain these, I wish to correct the generally prevalent idea that they are only mechanical employments, and that their purpose is simply to train the hand of the child, and to serve as a foil to the more intellectual exercises with the solid and plane geometric forms. The Kindergarten is not a school, where lessons are alternated with fancy work, and there is no broad distinction between gifts involving more or less intellectual effort, and occupations implying principally mechanical neatness of execution. The occupations of the Kindergarten are based upon the same general laws and regulated by the same general principles which apply to the gifts, and their effect upon the total harmonious development of the child is even more striking than the effect of the blocks, squares, triangles, and sticks, to which they are sometimes most judiciously subordinated.

The true distinction between the gifts and occupations is, that while the former are derived by analysis from the solid, the latter are evolved by synthesis from the point, and while in the former the child simply makes different combinations of definitely determined material, in the

latter there is progressive modification and transformation of the material itself. Thus, from picking where all kinds of harmonious figures are produced, by simply sticking holes in paper, we pass to the line in sewing and drawing—to the transition from the line to the surface in weaving and interlacing of paper—to the surface itself in the squares of paper used for folding and cutting—to the outlines of solids in pea-work—to the surface boundaries of solids in the card-board modeling, and to the solid itself in clay. Thus, by a different road, we have reached our original starting-point, or rather, having made a kind of spiritual assent, we are now surveying the same truths from a higher plane. A vital point of connection between the gifts and the occupations lies in the fact that the latter offer the child the best possible means of embodying in visible and permanent form the impressions received through the former. Thus in pricking, sewing, and drawing, the children, when told to invent, almost invariably begin by reproducing the forms with which they have become familiar in their play with blocks and sticks—the same truth applies to their inventions in mats, paper-folding, and paper-cutting—and an intelligent teacher can judge absolutely of the effect of her work by the free productions of her scholars.

Thus far, we have considered the Kindergarten gifts and occupations simply from the stand-point of their effect upon the intellectual development of the child. They have, however, an additional significance in the fact that, taken together, they form a complete alphabet of work and exercise the hand in all the technical processes by which man converts raw material to his use. Ever since the days of Locke, thinkers and philanthropists have been trying to solve the problems of educating skilled laborers, and many have been the experiments of schools for the working classes, nearly all of which have failed, because built on a wrong foundation.

The truth which Froebel plainly saw, was that the schools should strive, not to turn out good shoemakers, bookbinders, or watchmakers—not, in fact, to teach any special trade, but to give such preparatory training and practice as would make all technical processes simple. Upon this basis he organized the Kindergarten gifts and occupations, and, taken together, they represent every kind of technical activity, from the mere agglomerating of raw material to the delicate processes of plastic art.

Thus Froebel's gifts have three-fold purpose and a three-fold application. Based upon the unchangeable facts of form and relations of number, they work powerfully in the direction of a healthy development of the mind, by their countless beautiful combinations of color and form the aesthetic nature is roused, and by the practical work they necessitate the senses are sharpened and the hand is trained. They appeal to the whole

nature of the child, reaching at once his intellect, his emotions, and his physical activities, and contribute to produce a balanced development not attainable, I believe, by any other system. So much for the Kindergarten material. A few words now as to the manner in which this material is used.

The practical basis of the Kindergarten method is expressed in the formula. "We learn through doing." It was a favorite saying of Froebel's that the world is sick with thinking and can only be cured by acting; and accordingly in the Kindergarten free activity is the essential thing. The children roll and throw their balls, build with their blocks and lay figures with their sticks; they fold, they sew, they weave, they model, and gradually the labor of the hand clears the thought of the mind, and by using objects as material for work their properties and powers are learned. In this lies the great difference between Pestalozzi and Froebel; for while the object lessons of the former appeal directly to the powers of observation, the latter realized that children would never carefully and exhaustively observe any object with which they were not practically occupied. Children in the Kindergarten observe, because they are constantly trying to reproduce, and their failure to attain satisfactory results causes them to notice objects more carefully. Another excellent result of Froebel's demand that the child shall learn through doing, is that it effectually prevents that rapid acquisition of superficial knowledge which is the bane of the present age.

It is true that the path of learning should be made pleasant; it is not true that it should be made so smooth that it may be trodden without effort. He who struggles up no Hill Difficult will never reach the Palace Beautiful, and the plan of constantly removing obstacles, instead of encouraging pupils to surmount them, both enfeebles character and destroys the vitality of the mind.

In the Kindergarten the children work for what they get, but the steps by which they advance, are so gradual that whenever they make a faithful effort, they attain some result. Consequently, they gain faith in their own ability to surmount obstacles, and develop in mind and will, at the same time that they are constantly adding to their little store of ideas and experiences. Again, what they know they must know thoroughly, for the mind can only use and apply what it has perfectly assimilated, and the salient feature of Froebel's method is that it transforms every element of knowledge into an element of creation.

If the practical basis of the Kindergarten is expressed in the formula "We learn through doing," its intellectual basis is stated with equal definiteness in Froebel's so-called Doctrine of Opposites. No feature of Froebel's method is so difficult to explain as this, and yet it is the living link which connects the different parts of the

system into a complete whole, and as applied practically in the Kindergarten, is as simple in its nature as it is fruitful in its results. It is based upon the logical law of the identity of contraries, a law which many philosophers have recognized as the necessary condition of thought. We cannot conceive anything without implying its opposite. We cannot think up without implying down. We cannot think of light without implying darkness. We cannot realize extension without assuming limitation. "In all distinction," as has been well said, "the element effective of distinction works through negation, and, therefore, affirmation and negation, identity and difference must be taken together as constituting between them but a single truth."

Froebel claims that as our thought is conditioned by the law, education should recognize and apply it, and he embodies it in the statement that "the principle of all creative activity is the reconciliation of opposites by an intermediate partaking of the nature of each of the extremes. This law governs the application of every Kindergarten gift and occupation, and while its philosophic basis can only be mastered by earnest thought, it is practically so simple that the child four years old uses it with the greatest ease and happiest results. The countersigns of the true Kindergarten are "Reverse, and keep your opposite alike," and I feel sure that any person who will honestly observe the effect of this principle in the development of originality and creativeness, will admit that Froebel has found the true law of human activity, and has shown how it should be applied.

A system based upon the necessities of the child, must naturally provide for physical exercise and development. Accordingly, in the Kindergarten gymnastic games, accompanied with song, are an essential feature of each day's programme. In these games the children get abundant opportunity for using their legs and arms, while the fact that nearly all of them are more or less dramatic, make them also developing to the imagination and sympathies.

From the moral stand-point the chief significance of Froebel's method is the recognition of the child, both as a distinct individual and as member of a collective organism. The great problem for man has always been to harmonize the freedom of the one with the interests of the many, and to secure the development of the individual without sacrificing the order and stability which are the safeguards of general society. In the Kindergarten the children are associated together under the most favorable conditions, and while individuality is strongly developed, each child early learns that his rights are limited by the rights of others. The only punishment inflicted is isolation of the selfish, willful, or quarrelsome child from the society of his companions; and on the other hand, where praise is given, it is given not by the

teacher alone, but by the teacher and children together. Thus the kindergarten is a world in embryo—a world where small virtues are nursed into strength by exercise, where small faults are gradually overcome, because their effects are clearly seen, and where character is harmoniously developed because the same truths realized is law are felt as love.

The result of Froebel's system thus far have been partial and inadequate, because in many cases its principles have not been understood and applied. Its vitality and power are proved by the fact that through all discouragements it has steadily won its way, and every day challenges more imperatively the attention of educators. Planted now in all parts of Germany—made by Imperial edict the basis of education in Austria, and introduced, though imperfectly, in Russia, France, Italy, England, and the United States, its merits will in the next few years be widely and thoroughly tested, and the general applicability of its methods determined. Its advocates ask only that it may be judged by its fruits, and, as their most conclusive argument, point to the children trained in accordance with its principles.

METHODS OF CULTURE.

BY J. BALDWIN.

IX. Culture of Memory.

Memory.

- I. Definition and Relations.
- II. Theories.
- III. Importance of Culture.
- IV. Laws of Culture.
- V. Time of Culture.
- VI. Means of Culture.
- VII. Methods of Culture.
- VIII. Educational Mistakes.
- IX. Right Methods of Teaching the branches

V. *Time of Culture.* The time for the systematic and thorough culture of memory is evidently in childhood and youth. Only growing corn is cultivated. But, if the course that develops and disciplines is continued, this faculty may be kept vigorous even down to old age. Tenacious and ready memory at seventy ought to be the rule, and not the exception.

VI. *Means of Culture.* Like all the resources of nature, the means for memory culture are in rich abundance. The boundless fields of observation and thought are to be garnered. Science, language, literature, history, mathematics, ethics and esthetics, are all means. Conversation; writing, and each one's life work, are means. Whoever fails to cultivate memory, starves in the midst of all luxuries.

VII. *Methods of Culture.* Educational means and methods change from age to age and from year to year. Educational principles remain the same forever. The method is good when educational means are used in accordance with educational principles.

1. Method means judicious exercise. As with the body, over exertion and under exertion are to be guarded against. The exercise should be vigorous and pleasant, but should stop short of exhaustion. "Develop

the understanding but do not crowd the memory," is a safe rule. Judicious exercise is the true genii. It evokes every human power, and enables the soul to recall and use its previous acquisitions.

2. Method means complete adaptation. The means as well as the method must be adapted to the capacity of the learner. This principle is fundamental. It permeates all true teaching, and necessitates the profound study of child mind. Adaptation is pre-eminently the work of the teacher. He must ever use the means and methods best for the learner at the time. No iron rules, no ruts, no copying, no repeating, can be tolerated. As no two cases can ever be the same, each lesson must be original, must be adapted. This is the germ of artistic teaching. Principles are eternal, but methods are plastic. The wise soul-builder studies the ego and the non-ego from the stand-point of culture. Guided by unvarying principles, at every step he varies the means and the methods to suit the ever varying circumstances. Thus every power is called into active play. The soul firmly grasps the vivid ideas, feelings, and purposes, and readily recalls such acquisitions.

3. Method means systematic arrangement. The realm of knowledge is one. Innumerable links unite all the sciences into one grand circle. The parts of each science are naturally related to each other. We readily reproduce systematized knowledge, because the relations and connections are firmly fixed in the mind. With a thousand letters in a pile, the postmaster might spend hours before finding yours; but with the same letters arranged alphabetically, he can instantly find the one sought. The mechanic who is systematic finds at once the tool needed. The methodic housekeeper is not at a loss to find her scissors, or thimble, or needle case. No one can fail to see how system aids memory. Great memory means great system. Hence the learner must be trained to classify, to arrange logically, and to diagram. Isolated facts are almost worthless, and can hardly be recalled. In all learning and teaching this principle should be kept steadily in view. Idea must be linked to idea, as the mason cements brick to brick, or the smith welds iron to iron. Systematic arrangement, in most cases, makes the difference between a good memory and a poor memory.

4. Method means right habits of study. Deep interest and close attention are primary conditions of memory culture. Incalculable injury results from permitting pupils to dream over lessons. Let the impressions be distinct, vivid, intense—and memory will be ready, distinct, and accurate. "Hasten slowly, and learn thoroughly what you learn," is a golden rule. "Soon acquired, soon forgotten," has become a proverb.

The learner should frequently review and constantly use his knowledge. Thus his memory will be

cultivated, and his knowledge rendered available. To train pupils how to study is decidedly the most important office of the teacher. This is the very foundation of memory culture.

5. Methods of culture mean right methods of teaching. [1.] Teach one thing at a time, and teach its connection with other things. [2.] Teach thoroughly the great features of the subject. Avoid burdening memory with unimportant details. [3.] Lead the pupil to work up to definitions, principles and rules, and to indelibly fix them in memory. [4.] Knowledge before memory. Words without ideas are dead weights. Requiring children to commit things not understood, such as tables, definitions, rules, etc., is a fatal error. Not mere words, but ideas, relations and language as the embodiment of thought, are what the pupil needs to remember. [5.] Follow nature's order. Let the objective precede the subjective, the synthetic the analytic, the inductive the deductive. Lead the pupil from objects to ideas, from ideas to words, from the concrete to the abstract, from individuals to classes, from particulars to generals. What is thus learned will remain fresh in memory through the whole life.

From the stand-point of *culture*, evidently a mighty revolution in current methods of teaching is needed. But the consideration of Educational Mistakes, and of methods of so teaching the various branches as to cultivate memory, must be reserved for another paper.

KIRKSVILLE, Mo., 1875.

CULTURE AND EXACT KNOWLEDGE.

BY H. H. MORGAN.

THE human mind is slow to recognize the many-sidedness of any subject; it is apt to mistake its desire for a comprehensive grasp, for the grasp itself. To mankind in the abstract everything human is possible; to any individual man this possibility exists only in the abstract. To mankind at large all the processes of arithmetic are feasible; to the individual man only the simpler operations are intelligible. Hence the importance for a determination of the function or special office of each study. If we know what we are trying to do it is possible to reach the end proposed and to verify our results; if we disregard the aim and confine our attention to methods we may exhaust our strength and yet waste our efforts; the methods well suited to the attainment of one object become valueless if directed to the opposite. Notwithstanding that eight years are given to the study of arithmetic, no one expects his class to go beyond interest; and even with these narrow limits the results by no means correspond to expectation. How shall this be remedied? What is the cause of the difficulty? An answer to either question is not to be found in the adoption of any method even if abstractly the best; the evil cannot be cured by a different arrangement of the matter

to be taught or by any increased zeal and enthusiasm on the part of the teacher; it can be reached solely by a definite knowledge of the end to be attained and by a seeking of this single end.

Given children of the average ability and age, what shall we attempt under the name of arithmetic? Shall it be an elementary knowledge of the science, or a thorough though limited knowledge of the art? Shall we educate them with reference to what we judge their future immediate wants, or shall we content ourselves with that general knowledge that belongs to what we call general intelligence? Shall each teacher decide this question by his own judgment or shall it be decided authoritatively? It seems to me that system is impossible and valueless without uniformity and that this can be obtained only by authoritative decision. Let the Board through its proper officers settle what it wants and then the teacher can at least know what he is trying to do. If we say that the object of arithmetic as an element of education is to prepare one to deal with the arithmetical problems of every day life, then we shall emphasize practice; we shall cause our pupils to add, subtract, multiply, and divide, until they have attained readiness and entire accuracy and we shall be well satisfied if they know only these operations while they know these well. If on the other hand we look at arithmetic as a part of general culture, we shall emphasize the understanding of all arithmetical processes and be indifferent as to rapidity and accuracy. Again, grammar may mean the knowledge of how to write and speak correctly, or it may mean the ability so to write and speak. One may have done his work well and yet be unable to either speak or write correctly; or one may have a perfect correctness and yet be ignorant of any reason for the faith that is in him. So with geography; it is not enough to prefer commercial, political or physical geography; to debate the order in which one shall learn local or foreign geography; it is more necessary to receive an answer to the question what is meant in any given system of schools by a knowledge of geography; when this is attained, the teacher may feel dissatisfied but he can feel secure against any criticism of his work. Thus also with history, spelling, algebra, language or aught else. Upon the basis assumed no unauthorized person could answer the question proposed, and yet that the answer may be true as well as authoritative it will be necessary for each individual to pronounce his opinion in order that it may form a moment of the final answer and thereby make this answer measurably true. Looking at the work alone, I should say that too much praise could not be given the teachers for their efforts—if we regard only conscientiousness and success in the attainment of the ends proposed; but if we were to question the validity of these ends we might attain greater un-

ity and improve the nature of our work. It seems to me that the culture side is insisted upon too exclusively; as if this side were too far from the pupil to be anything but an abstraction; as if we forgot that strength of mind can only be acquired gradually and that processes very simple to the mature mind can be but empty formulas to an immature mind. The result of a mistake in this direction is to flatten and not to broaden; to give one a recollection of what has been said about many subjects, rather than a distinct perception of any one thing. Without debating the relative value of culture and exact knowledge, as these might affect man in the abstract; without questioning the order in which these should be presented to the child who will in the end have both; I would consider the value of each to the actual child as found in our public schools. With such a child I should suppose the direct and most pressing need to be the "use of the instrumentalities by which the problems of life are to be solved;" the knowledge of the means by which his life is to bring its fullest reward. And from this standpoint I should say that the primary end was for him to seek skill and that culture was to be considered only as incidental. That is through arithmetic one was to learn to add, divide, subtract and multiply; to apply these operations to fractions as well as to whole numbers; to learn the use of decimals rather than to learn about decimals, and that having been taught to be accurate and ready in these operations of every day life, he was to be accounted an arithmetician so far as the grammar schools could undertake to make him one. The knowledge of processes should, it seems to me, be incidental and not the main object; it is better for the average boy to be able to add than to know why he does any particular thing in adding; to be able to obtain the right product than to understand the process by which it might be attained. This I say is better for the average pupil; the exceptional pupil can do both, or he can acquire the discipline after he has attained the skill. So too with grammar, spelling, geography and history; the average pupil will do better to accumulate a given amount of accurate knowledge, than to gain a vague, loose idea of an infinity of things. We have been told the psychology of the mental development; how the child first remembers, then understands, then comprehends. Through the grammar schools then pupils are to seek largely what belongs to the realm of memory; it is not until a child is 15 or 16 that he can begin to understand and it is even later that he can comprehend. At the end of a grammar school course, one might ask with fairness, can you add, multiply, divide and subtract? can you write without misspelling ordinary words, can you construct a sentence without gross errors in grammatical structure? Do you know the main events in the history of your

country? Have you an idea of the general situation, size, etc., of different countries? If you have these and can write a legible hand you have done all that could be expected from you. But it will be said, shall culture be neglected? No, but in any system there is a fittest place for everything and each thing in its place is best. The disciplinary work must come first; one must acquire subjects for thought before thought can exert itself; knowledge may be lower than culture but it is lower only in the sense that the foundation is lower than the super-structure; it is the more essential of the two and must ever precede culture. After one has learned the elements of a study he can be made to combine these elements; if we attempt discipline too soon, we shall only cause the pupil to learn mechanically what ought to be the spontaneous work of the mind, while he neglects those processes which are properly mechanical. To attempt to crowd 12 years work into 8 is to be very unwise; to prefer the last 4 years work to the first is to invert the structure; to distribute the whole work simply by years, is to sacrifice all that justifies system at all. The ill effects arising from any disagreement as to the function of studies are radical and evident; discontent upon the part of teachers, school officers and the community is the inevitable consequence. The outcome of this hasty paper, is therefore, that teachers make clear to themselves and to each other what they are trying to do; that by comparison of views upon this single point they find a statement that will fairly express the common judgment, and that this statement be then considered by the executive officers of our school system that we may work more wisely and as well. The culture side will always appear on the side of manners and morals and yet even here much of the work must first be didactic; first the child must obey; later he shall understand why he must obey.

ON HIGHER EDUCATION.

EXTRACTS from a paper read by Prof. Ashley before the "Olio" literary club of Springfield, Mo., in which he defends the present prominent position of Greek and Latin classics in collegiate education:

"The study of Greek and Latin affords the best and most rational means of exercising the faculties in the order of their development. The mental powers are not simultaneously developed, but follow a regular order of growth. In the child, perception, memory and imagination are first developed, and with these a wonderful aptness for the acquisition of language. Later come the rational faculties, and with their development the earlier powers seem to lose much of their acuteness. Now Greek and Latin afford just the elements needed for this earlier stage of the mind's growth, and at the same time, for the natural and thorough development of the rational faculties.

The race and the individual follow the same order of growth, and language keeps pace with the minds of those who use it.

The classic tongues are the languages of two of the most powerful families of the Aryan race. They represent the synthetic period of language in its full power and beauty. The syntactical connection of words and the modification of the mental images which they represent are indicated to the eye by changes in form, thus affording a schedule of object lessons adapted in the best sense to develop the perceptive powers. In acquiring a vocabulary memory is developed and strengthened, while translation gives a power of expression, a subtlety of analysis, and a habit of keen discrimination, to be gained by the same time and effort in no other way.

Again, a classical education is the most practical education.

In making the assertion, we contend that the primary object of an education is to develop the mind, not to fill it with facts; to give discipline, not knowledge; to impart power, to think, not to furnish material for thought. The opinion has been expressed by several noted philosophers that any ordinary student may, under competent teachers, acquire all that Newton or LaPlace knew in two years; but to acquire their regal power of intellect were a different thing. This only comes as the fruit of a habit of long continued and intense thought such as is best acquired in a prolonged and critical study of the most faultless models of thought and speech. It is the young man who has the greatest power to know, not the one who has acquired the most knowledge, that will be the winner in life's fierce competition.

"But," says one, "why not gain your discipline in studying practical things?" We will answer by asking whether the study of history, rhetoric, political science, jurisprudence, and ethics are practical studies. When we study Herodotus and Livy we are studying the greatest historians. There are no text-books on rhetoric to equal Horace and Quintilian; none on political science or jurisprudence better than Cicero and Demosthenes; none on ethics purer and more persuasive than Socrates, Cicero and Plato.

There is no argument more fallacious than the one urged against the classics of want of practicality.

Prof. Cooke of Harvard University in his last address on "Scientific Culture" makes this remarkable concession: "After having spent a quarter of a century in assiduous labor to establish the present methods of science teaching, I am far from believing that they are the only true modes of obtaining a liberal education. So far from this, if it were necessary to choose one of two systems, I should favor the classical." After giving good reasons for this, he says further: "I never had any taste myself for classical studies, but I know that I owe

to the study a great part of the mental culture which has enabled me to do the work which has fallen to my share in life." Multitudes of instances might be cited in proof of this position, but we shall pass this point with a single undeniable assertion that a large majority of men who form all the works of life, and all the professions, have done the most to ennoble, dignify, and develop English and American scholarship in all departments of literature, science and art, have been and are classical scholars.

DRURY COLLEGE.

Notes on Army Education in Germany.

EXTRACT from correspondence of an American law student in Germany:

"I have been talking this afternoon with my old friend Herr Lange, and I find here an excellent opportunity to pick up information about Germany such as every one that comes here to study ought to get, but which some men who have been in Göttingen two years or more could not furnish me with.

I have been questioning him about the military system and the school system. It seems that all the children in the empire must go to school from six to fourteen years of age, to what they call the elementary school, and if they want to go to any other elementary school within their own district they must get permission; but if, after they are ten years old, they want to go to the gymnasium to prepare for the university, they can do so without special permission.

At twenty years of age each man must enter the army unless he is sick or weak, and must serve three years. The sick ones only have their service deferred till they are well. It one is part way through the gymnasium he can wait till he gets through, and then serve only one year; or if he is not in the gymnasium, but can pass an examination in French, English and mathematics, including arithmetic, Algebra, and Geometry, he need serve only one year. These one-year men are called *freewilligers*, or *free-willers*. They are left more to themselves, have more freedom, and can go to the beer-gardens in the evening. They provide their own clothes and food, and, I think, their own lodging. At least I know that some of them sleep at home when their regiment happens to be quartered in the place where they live. The effect of all this is to educate the masses; for I think they are obliged to study more or less during their three years service. It certainly does the peasants good. They say the officers make them do things straight and kick 'em about freely. The *freewilligers* are treated altogether differently. After their three years are over they come back about once a year for a week or two and go through the tactics, so as to not forget. The justice of making those that can pass the examination serve only one year, is that they can learn the discipline on an average in about one third of the time that the peasants need.



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TRANSFERRED BANKRUPTCY.

IT seems sometimes as if the solution of the problem of life were to be found in the word economy. It is not that we have not resources enough, but that we do not husband our resources, that reduces one to the uncomfortable condition of bankruptcy. We spend in one direction, and we have nothing to spend in another—that is all.

We indulge ourselves in reading or in other business or pleasure, and meanwhile our liabilities, in the form of unanswered letters are piling up their annoying mounds on our desk. We look at the pile in despair, and it accumulates day by day.

Finally, when the force of silent reproach conveyed in the sight of the confused envelopes grows to be greater than our indolence or our desire to do something else, we are no longer able to resist it, our wills succumb, and we seat ourselves before the pile, determined to clear off the desk, come what will. We do it. We answer and mail all the letters, and we find when we have finished that it is four o'clock in the morning.

We have only transferred the debtor account. We have paid all our debts in letters, but we are bankrupt in sleep. We take all that is left, say four hours, and the next day finds us bankrupt in power of attention and in power of thought. We have now fallen, however, into the hands of a worse creditor than were our correspondents or our fancies.

Nature is inexorable, and so finally, after putting off her demands for the morning or perhaps for the day, we are obliged to pay her, whatever else may happen; we spend the afternoon in a heavy sleep on the lounge, or fall asleep over our book at eight in the evening, and devote twelve hours of that night to rest—thus only again transferring the bankruptcy to another creditor—missing perhaps an appointment, or being obliged to forego the reading of said book altogether.

There is evidently no economy

here. We simply plunge from one slough of despond into another, gaining nothing by the plunge, and what is the comical part of the affair, is that in the end we always find ourselves obliged to curtail the very enjoyments for the possession of which we first incurred the debt.

We find ourselves involved in a circle of co-related forces whose victim, not whose master we seem to be. Evidently, whenever this happens, we must recognize, however unwillingly, the fact that we are not acting like reasonable beings. We feel ourselves to be the sport of circumstances, and despise ourselves accordingly.

If in experiences of this kind we gain the knowledge that we shall always have our deed, whatever it is, returned to us in full measure, "pressed down, shaken together, and running over," our trouble will not have been in vain.

Often the fact may be that our time is not really deficient for the engagements we choose to make, but oftener it is the case that the trouble does not lie in the amount of time, but in the want of economy in our disposition of it.

One who does not understand packing goods will not be able to put into a case half the amount which a practiced packer will easily dispose of, and have room to spare. The failure of the first workman does not demonstrate any great difficulty in his task, but simply a want of skill in himself—or else not sufficient attention given to his labor.

This is only one side of the great topic of economy. But economy is a virtue, or rather an art, of which every teacher should be master, and which he should teach to his pupils, and inculcate on every hour of every day, and in the most trifling matters. Economy in time means attention, order, punctuality, regularity, exactness in conduct and in lessons.

"The world is wide—these things are small—They may be little, but they are all."

Drain the Bottom-lands and Swamps.

AS the glory and resources of Holland for centuries have been the result of her manufactures and commerce, and as both these have been the product of her excellent tillage in large measure, so the problem of education now in our country is very considerably that of drainage.

Drainage is the preliminary of tillage to such an extent that no wet land, no swamp, marsh, or morass, is fit for farmer or planter to cultivate or till until it has been drained.

As money is the sinews of war, so it is of every enterprise.

The ignorance, the crime, the bigotry, the superstition, that stagnates in the slums of our large cities, and putrefies among the indolent and be-sotted, that gathers like a vast "Dismal Swamp" under cover of any great oppression or systematic tyranny over the bodies or the souls of multitudes, can be removed only by time, labor and money.

Tax-payers of the mighty West and Southwest, you are men who understand when it pays to lay out money, when it is that your money is laid out as a barrier and safeguard against loss; and also, when it is neither an investment nor a safeguard, but a dead and buried concern.

It pays to build and keep up the long levee, for it protects the rich plantations of bottom land, and to let them break is to flood millions of dollars' worth of very fertile land, and ruin it for the crops of one season or more than one. It would pay to spend double the cost annually of repairs, were it necessary, to keep the water where it belongs. The ounce of prevention is worth the pound of cure.

Tax-payers, you are called on to mend the levee, and save the fertile lands. Drain the lowlands. Yes, and drain the broad swamps where ignorance rots and ruins the souls of thousands of the young. They may be taught yet, may be enlightened by the sun of knowledge, and warmed by the fervor of kindness. Neglect them, and in a few years, you and they perish alike, wretched victims of ignorance and pestilential miasms which you allow to infect some of the loveliest sections of our glorious States.

THE BEST GUARANTEE OF SUCCESS.

PROF. HOUGH in his paper read before the American Association for the advancement of science says it "May now be regarded as a maxim that nobody will deny, that education is the best guarantee of success, in every conceivable direction of human enterprise,—that the man best acquainted with the principles upon which his business is founded, will, with proper forethought and prudence, excel another, who, under like circumstances, may lack this attainment; and in short, that "KNOWLEDGE IS POWER," and that its increase and diffusion through every grade of society is the best guaranty of the perpetuity of our civil institutions, and of the future increase of our national prosperity. If we examine into the details of our material prosperity, its elements will be found mainly to consist in the application of principles first discovered by science, and afterwards turned to use, either directly by the original discoverer or, quite as often, by others more favored by genius or opportunity, and qualified by education to comprehend and apply the principle, and to meet and modify the circumstances incident to its application. Thus, whether the object be a labor-saving agricultural or mechanical implement, a manufactured or chemical product, or an improved process, we stand indebted to science and education for their discovery, application, and use, and in every review of our national history, whether general or special, we are met in the beginning with this fact of relation and dependence, and are in justice required to admit its presence and value.

HELP TO CORRECT IT.

IRREGULAR attendance is perhaps the most serious obstacle in the way of our success in the country, and is the direct and legitimate parent of more than one-half the disadvantage under which we labor. Its direful effects are severely felt in a majority of the country schools. It is impossible to properly grade or classify a school where it exists. It imposes upon the teacher much extra labor to interest the irregular pupils, and assist them to keep up with their classes. It causes an abatement of interest in those who do attend regularly and robs them of their rights in the school. It prevents the adoption and successful prosecution of any systematic plan of government or instruction, and demoralizes the affairs of a school generally.

Parents and guardians can do very much to help correct this evil and avoid the consequence of it.

HINTS TO YOUNG TEACHERS.

A WRITER in the *New England Journal of Education* says that it will not do for school journals or Teachers' Conventions to overlook, and ignore the claims of the country schools, and of the inexperienced teachers employed in them.

We are glad to have special attention called to this matter by some of our contemporaries for there is a lack of practical help just at this point.

The writer says specifically:

"It is an undeniable fact, that in our land, there are thousands of schools, which either from the smallness of the numbers, or the poverty of the inhabitants, cannot afford to pay high wages, and consequently are obliged to employ inexperienced teachers; and these young teachers, with none of the helps so easily found in the city, with no opportunity to mingle with other and more experienced teachers, are expected to instruct scholars, of every degree of advancement from *a, b, c*, to algebra; and at the same time keep perfect order. If they succeed they gain no glory, and if they fail it is, 'Just what you might expect, if people will employ cheap teachers.'

I have felt a great deal of sympathy, for those placed in such uncomfortable, as well as unfavorable positions. I shall suppose that you are somewhere from sixteen to twenty years old, and that you have never taught school. Your school-house is not particularly attractive; you have but a small supply of blackboards, no globes, no outline maps, none of the thousand and one things, which are like tools in a teacher's hands; but you are expected, as a discouraged pedagogue said to me one day, "to evolve everything out of your inner consciousness." You have, perhaps, a school of about twenty in prospect, of all ages, from little toddling things, sent to be out of the way, all the way up, to big burly boys a head taller than yourself, and giggling girls, who expect to study the big boys as much

as anything. Your heart sinks every time that you think of next Monday, and you wonder if you can make them behave, and if you will succeed in teaching, and in doing it well.

You want the pay—I don't think anyone teaches from *pure* philanthropy—but you mean to earn it. You feel a sincere interest in the children, and you wish to benefit them mentally and morally, but you scarcely know how to do it, or what you should do first. Of course you must always depend upon your own common sense, to apply and vary general directions to suit your peculiar circumstances.

TIMELY INSTRUCTIONS.

WE hope every County Superintendent in the State will promptly and fully respond to the call of Hon. Leon Trousdale, State Superintendent of Public Instruction, on the following points: If the friends of education in each county, teachers and school officers, will render the County Superintendents aid, it will greatly facilitate matters, and the benefits accruing to the pupils, parents, teachers and others, will be mutual.

THE ONE MILL TAX.

Has the one mill tax, for the support of public schools, required by the 38th section of the School Law, been regularly collected, and if not, why has not the law thus been complied with? This inquiry is rendered necessary by the default to collect in at least one county in the State.

Also, the statistics of all Universities, Colleges and Private Schools, within their respective counties, during the past year, setting forth number of professors or teachers, number of pupils in attendance, average cost per pupil, when it is practicable to do so. When no such Schools are in existence in a county, the fact will be so reported.

County Superintendents are further instructed to report to the State Superintendent on or before the 1st day of December, answers to the following questions in as full and accurate a form as possible. These questions are such as come under the cognizance of the Superintendent himself, and require no other reports for their preparation:

1st. What is the progress and success of the schools in your county, as compared with last year?

2nd. What progress have you made as to uniformity in text books in your county?

3rd. How many graded schools are there in your county?

4th. How many of your schools have charts, globes and blackboards?

5th. How much, if any, interest have your Directors shown by visiting the schools, and have parents and citizens exhibited such interest?

6th. What is the character of the competency of your teachers: is there great deficiency: and what per centum of same?

7th. Have any new school houses been erected during the year, and of what character? Were they erected by private means or from the School Fund, and what is the general character and condition of your school houses?

8th. Have you established a County Institute in your county? If so how often does it meet? What per cent. of the teachers

attend the same, and what is the character of exercises? Do you find it advantageous to teachers as it is conducted? Would you favor a rule enforcing compulsory attendance, at these Institutes, upon teachers?

9th. What do you regard as the leading obstacle to the success of public schools in your county?

10th. Is the public sentiment in your county favorable to free schools, and if so, is this sentiment increasing or otherwise?

11th. In your inspection of schools have you found the discipline good or otherwise? Have you found the teachers keeping their Registers daily, it being one of your first duties to inquire and see that this is done? Have you found the school houses comfortable or otherwise?

12th. At what time have your schools opened during the present year?

13th. In your visitations, during the year, have you known of any defalcation of the Treasurers, or any misappropriation by them of the School Fund; and, if so, have you duly reported the same and prosecuted the defaulter?

Answers to these questions are deemed important to the interests of the public schools. If full and accurate answers are given, we shall have in possession much valuable information for future guidance. It is believed there is not one question here noted, which may not be answered promptly by an intelligent Superintendent. All are urged to take the utmost pains in giving due attention to each one of them.

A WORD FOR THE JOURNAL.

PROF. J. C. MASON, late of Columbus Miss., now of Carthage, Mo., says:

"We build for the ages. Give us some liberal journal, upon whose broad platform the educational fraternity of America can stand. Let it observe, collect, compare, suggest, approve, condemn, originate,—any or all of these, but by all means let it be independent in the pursuit of truth, and devoted to the mental and moral elevation of the youthful millions inhabiting this continent. A sectional periodical will not do. A one-sided sectional culture will not satisfy the present civilization. We no longer train pupils to dwell in any particular State, but to become American citizens, to go forth, encounter and subdue ignorance, vice and crime, whenever and wherever they may present themselves. Mr. Editor, that the *American Journal of Education* meets the requirements above indicated, I feel confident. For many years, including sunshine and storm, I have watched the course of this periodical, have seen it deal with gigantic educational problems, now urging the friends of the cause to stand patient, strong and firm,—but be sure to stand—now appealing to its enemies to "spare that tree," and persuading them by irresistible logic that broadcast intelligence and republican government cannot long be separated. Have personally observed its effect for good in districts rural and municipal, west and south, and while I do not claim for it that special and technical treatment of certain topics peculiar to some periodicals prepared for local circulation, yet I do say that as a pioneer in educational work, cal-

culated to awake communities to the results hanging upon ignorance or education, aiding school officers, and cheering and strengthening teachers in the discharge of duty, *it stands unrivaled.*

EDUCATION BY THE STATE.

[NO. 2]

IN "Observer's" article, under review in the last issue of the JOURNAL, occurs this paragraph:—"While the denominational schools are languishing these Normals are fat and flourishing. Let them now stand alone or fall as they deserve. Abolish that clause in our school law that devotes 25 per cent. of the State revenues to school purposes,—etc." I supposed I had concluded all the criticisms I should desire to make upon the character—credibility—of Observer's article I had appended my signature to what I have already written. But the "bump of destructiveness," I am told, stands prominently on my cranium, and I offer this as an apology to the readers of the Journal for a brief continuance of the "expose." An apology is hardly due Observer; since I give him the benefit of a generous reproduction of his views, (optical illusions,—figuratively) in his own language.

By reference to the language quoted it will be seen that the inference that the Normals are supported by means and in pursuance of that "clause in our school law that devotes 25 per cent. of the State revenues to school purposes," is necessary and unavoidable. It is a pity to spoil the effect of a labored article, but my natural propensity irresistably leads me to the destruction of the whole thing by the statement of a single fact. No Normal school in the State has ever realized as much as a mill or the value of a mill, from the 25 per cent. alluded to. The funds arising from this source could not, legally, be so applied.

But apropos of this appeal to the legislature to repeal this obnoxious statute, let me cite Observer to the new constitution. The legislature will be powerless to grant the prayer. While Observer slept the people protected themselves against the danger he pointed out by removing this question beyond the control of the legislature. If it seems malicious to ask Observer if he desires now to "offer a compromise," the writer hereof timidly begs to offer, as an amende honorable, the plea that his "heart is all right;"—it has not erred.

It is well, perhaps, to outline, at once, the drift of my thought,—the bearing, the objective point,—of the argument I propose. This can be briefly done and clearly seen in quotations from Observer, accompanied by emendations and explanations; as follows:

"The great problem for the people of this country to solve is found in this question; who shall educate?" (Amend by substituting—one of the gravest and most important problems.) "There are three answers,—

1. The church shall control in the education of the young.
2. The State shall do this.
3. The parent shall have this authority."

Two of these answers are vague, and perhaps skillfully arranged to mislead the unwary. Let us have every position or assumption boldly, unreservedly, declared. In other words, let us conduct this investigation honestly. Let us define the terms and phrases we use; define their exact limits. Then we shall know precisely what we intend to do. For instance, the expressions "do this" in the 2nd answer, and "have this authority" in the 3rd are exactly equivalent to "control in the education of the young," in the 1st. "The young" in this proposition clearly means *all the young* (say all who have not reached maturity or adolescence;) and that the church shall *control* in their education means that she alone,—to the exclusion of all other agencies,—shall provide all the education that shall be permitted. Thus explained, we are ready to pronounce the proposition absurd, and impossible of accomplishment.

That the State shall have exclusive control of the education of its citizens' children neither the State, nor any same man ever claimed, and hence the second answer proves to be "a rattle and clatter of words" without point or significance. Hence in my first article I characterized Observer's brilliant effusion a "Quixotic attack."

That the parent (of course each and every parent) shall have the exclusive control,—guidance or direction,—of the education of its child, is almost too ridiculous for sober discussion. When attention is called to the mental darkness and squalid poverty of the multiplied thousands of unfortunate parents who afflict society, and upon whom, in a certain sense, society, and government, rests, the absurdity of the position stands boldly out in unseemly nakedness, and reveals a hideous moral deformity. Yet we are vauntingly told this "last (3rd) is the true answer."

The truth is, neither answer fulfills the condition imposed by the question to which it shamelessly professes to be a response. Each answer compasses a great deal more than is implied in, or can be deduced from the interrogatory "who shall educate?" Still further, the very form of the question is a fraud, and the framing of it was disingenuous. "Who shall educate,"—forsooth? Why, every individual, every corporation, every society, organization, sodality, power, government, should, of right, and does, in fact, *educate*, in an abstract sense. Is it meant who has the *right* to establish schools or educational institutions? If so, who questions the right of churches or parents to do this? Has the State objected? "The church can not do it. The State should not be allowed to do it." It? What? Assume the privilege of educating as its exclusive prerogative? Of course the church can not, and the

State ought not, to do this thing. But since when has the State been endeavoring to establish such claim?

A spirit of candor and fairness would have compelled the framing of some such question as this,—*has the State a right to provide a system of free education for its children?* This is the real question at issue. Let this be the g. e. d. in our investigations and controversies. Or, that it may not be claimed that an undue advantage is sought to be taken in the position chosen, if it is desired, I will base the investigation on the question, *ought the State to maintain, by taxation, a system of public schools?* I am afraid the enemies of popular education will not agree to accept this as the only point in dispute. My experience has taught me that they are wary and shrewd. That when a vigorous assault is being made on one of their central positions they change their base with marvelous celerity, or open a sort of masked battery in rear or on flank, and keep up a running fusilade from small calibred smooth-bores, to divert the attention and scatter the forces of their assailants. But let us press right on, so long as there is organized opposition in front. The State *must* educate her citizens. It is an unavoidable necessity.

WHAT IS THE STATE?

There is a misconception in the minds of many as to the nature, the identity, of this thing we call "the State," or government, as is evidenced by the form of speech that indicates a distant object;—something distinct from the people, something set apart from them and placed over them,—a sort of arbitrary and autocratic thing whose mildest behest, even, is to be followed with reluctance, or obeyed under protest. This view is, of course, all wrong, and could not be true in the United States until we should reach our antipodes in the realm of government. People frequently fall into the despicable habit of regarding the government as an institution for which they are not responsible and in which they need take no interest beyond the devising of ways and means to escape its burdens. This is one of the most dangerous tendencies of to-day. The error must be corrected, the false notion (or impression) must be dissipated.

In the discussion before us it is all important to keep constantly in mind a clear and accurate idea of the nature of government,—of the State,—for in this correct view is founded the justification of popular education. We say, the State maintains a public school system. What do we mean by the State? Not the State officers. They are subject to the laws and the Constitution. Not the legislature, for it is a representative body simply and can not execute the trust committed to it, except within the meets and bounds established for their guidance and control in the organic law. The State is something back of them, which requires the services of these agents to accomplish its ends. What-

ever the power is, that is the State; and in America we have always recognized the people as the supreme power. Government therefore with us, is an assemblage of individuals for the purpose of promoting the general welfare and securing individual protection and common safety. The State government, accurately defined, is the banding together and the co-operation of a majority of the citizens of the State to secure these ends, to secure them it is legitimate and right, *aye, necessary*, to tax the brain, the muscle, and the purse, of the members of this society. These are divinely vested and inalienable rights;—universally so recognized. Whatever demands upon the citizen may necessarily flow out of this relation of the individual to the collective body may justly be exacted, and will be cheerfully complied with by every good citizen and genuine patriot. The State certainly has a right to claim this extent of service, and has no right to require more. Education is claimed to be one of these necessary consequences, and will be discussed in another article. On this ground alone will popular education be at present defended.

R. D. SHANNON.
JEFFERSON CITY, NOV. 20, 1875.

The New Constitution—Public Schools.

THE contest over the new constitution of Texas will, probably, turn on its school-fund provisions. The convention has not yet adjourned, but the discussion of these provisions is already warm. The new constitution does not allow the levy of a state tax for the support of public schools—and it is a strong and very popular opposition to this prohibition that threatens to defeat the instrument. The opposition is not confined to the Republicans; a great many Democrats share it, and some of the leading Democratic papers in the State are preparing to resist the new organic law, in the interest of free education. They argue that as Texas has little debt and is the objective point of a large immigration from the Western states, a liberal school tax is one of the necessities of the times. If the convention should adjourn without reconsidering its action on the subject, the new constitution will have a good chance of being voted down."

The above extract is copied from the St. Louis Republican a Democratic paper to show what outsiders think of our efforts at constitution making. It but echoes the sentiment of almost the entire press of the State, and a large majority of the people of Texas. The article on public free school has passed, and if it goes before the people as it now stands will afford one of the strongest arguments for the defeat of the entire constitution. The people of Texas are in favor of public free schools, nor will they rest satisfied till they have them. The press of the State calls loudly for a broad and liberal system of public education.

The members of the Convention who oppose a liberal school system may for a while flatter themselves that they represent the enlightened sentiment of the people. They have simply mistaken the tone of public sentiment. Their ideas have been based upon the expressions of opinion of the narrow circle in which they move at

home, and of which circle they are themselves the leaders.

The first section of the article declares that a general diffusion of knowledge being essential to the preservation of the liberties and rights of the people, it shall be the duty of the Legislature of the State, to establish and make suitable provision for the support and maintenance of an efficient System of Public Free Schools.

An efficient System of Public Free Schools!! How? A general diffusion of knowledge among these opposers of education would open their minds and perhaps enable them to see themselves as others see them, to see their own narrowness of conception of what a liberal system means and their fitness for other occupations than constitution making.

After declaring a principle that underlies all good government, the remainder of this article is taken up in showing "how not to do it."

The Legislature is required "to establish and make suitable provision for the support and maintenance of an efficient system of public free schools, and immediately such restrictions are thrown that it renders the whole thing a fraud. The present law is almost a failure, but it is far preferable to the new. It kept or pretended to keep schools open four months in the year, under the new law, schools cannot be kept open more than one month. It were better that we had no legislation whatever upon the subject. The people would then know what to do for themselves, and good and efficient private schools would be established such as we had before there was so much tinkering upon the delicate machinery by unskillful hands.

By this unwise action all hopes of our public schools are dashed to the ground, and our private schools are to continue to drag out their feeble existance, rendering satisfaction neither to teacher or parent.

Our sons and daughters must seek in other States the facilities for an education which are denied them at home. Our children have asked of our law makers bread and they have given them a stone.

Texas possesses within herself, all the natural resources to make her an empire in strength and influence, as well as in territory. But we need education to develop our resources. Inducements must be held out to immigrants. Wise provision for schools will do more to encourage the right kind of immigration than any other one measure. Labor and capital must not be driven away or hindered from coming.

The people of Texas demand a liberal system of public schools. They will be satisfied with no other. They are willing to sustain by taxation a well endowed and properly fostered system.

We still have some hope that on the final passage of the constitution some of the glaring defects may be removed, and that it will receive the approbation of the people.

Missouri Conservatory of Music at Springfield, Mo.

WE clip from an exchange the following notice of the formal opening and concert of the Missouri Conservatory of Music Nov. 4th.

"The concert given by the conservatory of music on Friday night at the Opera House was a decided success. The large hall was crowded to its utmost capacity with the beauty and wealth of our city. We have not space to notice in detail the programme. It is sufficient to say that every performance was worthy of the tal-

ent employed, and was most heartily applauded.

In connection with the musical entertainment a lecture was delivered by Rev. Robert Brown of Leavenworth, Kas., on Elocution and Music,—the first of a course on topics connected with musical culture. It had a thorough comprehension of the subject, was very carefully prepared, well delivered, and highly applauded by the intelligent audience.

The conservatory—just organized—has already nearly a hundred students,—and the attendance is constantly increasing.

While to the welllearned reputation of Prof. A. B. Brown, the director, as a musician, teacher and man, is due much of the interest thus manifested in good music by our community, our citizens acknowledge a lasting debt of gratitude to Dr. Morrison, the president of Drury College, to whose untiring efforts the successful organization of the conservatory as well as the triumphant success of the college (of which the conservatory is a permanent part) is mainly due. In saying this we do not forget the labors of any who have contributed to the upbuilding of those institutions here, which in the future will win for Springfield a high rank among the important towns of the west."

A MORE EXCELLENT WAY.

Your school rooms are heated by stoves I suppose, and in cold weather you find it difficult to keep the atmosphere of your rooms both warm and pure. If you open a window, the inflowing air is dangerously cold, and should be met only by wrappers and furs. To open a door is as bad or worse; and the result is, you are forced to stifle in order to keep warm. Of the two evils you doubtless choose the least, though I am sure it would be a better plan, when ever you find the air close and disagreeable (to one coming in from outside), for you to order on all hats and bonnets, overcoats and shawls, and give your pupils a little active physical exercise while the room is being aired and rewarmed. But I am going to tell you a more excellent way.

Get authority from the school director to buy an iron air register (such as are used in the floors or walls of houses warmed by furnaces), and set it in the floor directly under the stove. Should the air under the school room be impure, have a tight box to bring air from an opening in the foundation wall to this register, under the floor.

(If there is a piece of zinc under the stove, let the hole in the zinc be less than the hole in the floor, so as to allow the zinc to lap upon the border frame of the register. To guard against fire it would be better to build that part of the air box immediately below the register of brick.)

Now that you have it all nicely arranged, let me tell you how to use it.

Let the register be closed at night, and in the morning until the room is well warmed and occupied; then open the register and let it remain open till school is dismissed. If the weather is cold, build more fire, cork the tops of the windows, stop up the holes in the ceiling if there are any, but keep the register open.

If it is too warm, why of course

open a window a little, but it is false economy to shut the register because the cold air cools the stove. Perhaps you are wondering how the carbonic acid and the watery vapor from your lungs is to get out of the school room to make room for the cold air. I think it will manage to escape in some way. If the cold air comes in, you may be certain that the foul air is going out. Still if you think it best to provide a means of escape for the vitiated air you can do it in this way:—Build right against the warm flue of your chimney a second flue (of brick or wood) with an opening near the floor, and let the flue be always open.

The smoke of a burning cotton rag or torch will tell you of air currents, through the register and up the ventilating flue, and a few experiments will be more convincing than much theory.

Finally, let us hear of your success. Note especially the intellectual activity of your scholars the last hour of the session, as compared with their mental status formerly during the same hour, on cold days.

Should you teach in a city school-house, and should your room be warmed by air from a furnace, always keep the register opened during school hours. If the temperature gets above 70 deg. (and you must watch the thermometer, for your feelings are a poor guide) lower a sash an inch or two, but do not close the register.

A GROWING POWER.

THE "Warrensburg Democrat" in a late issue gives some interesting facts in regard to the present status and steady growth of the State Normal School of the Second District of Missouri, located at Warrensburg.

The report made to the Board of Regents, dated Dec. 1, 1874, and signed James Johnnot, shows there was a continued and steady *decrease* of pupils upon the roll during the last year of his administration. (See page 48 of last report of State Superintendent of Public Schools).

The "Democrat" says the number of pupils present at the opening of the term was larger than ever before, and it has been steadily gaining every week.

"Not only has the school proved a success as to numbers, but in every other particular it has shown itself to be an institution of which Missouri may well be proud.

The present session opened with an entire new corps of teachers, with one exception, and while we were satisfied, from what we could learn of the ability and qualifications of these new teachers, that the school had lost nothing in the change, yet, of course, we knew nothing of them as teachers, of our own personal knowledge; but now that we have seen the workings of the school under their management, we are prepared to say that our most ardent hopes have been fully realized, and to-day we have a better school than we have ever had before."

Testimony from other sources entitled to consideration confirms all that is said of the efficiency and strong practical work which is now being done by the new faculty, and we hope those desiring to teach in Southwest Missouri, will avail themselves of the superior advantages offered by this flourishing institution.

Other things being equal, a teacher, like an attorney or a physician, or a clergyman, is all the stronger for special study and training in his work, and every State, too, is stronger in proportion as it trains its teachers for their work.

In fact, many of the best teachers all through the West and South are Normal School graduates, but so far, the Normal Schools have not been able to supply one in a hundred of the demand for *trained* teachers.

Dr. Shannon, the State Superintendent, in speaking of the present faculty of this school, said: "The faculty of the Warrensburg Normal School is second in qualifications and ability to none in the West."

ARITHMETIC.

Editors Journal:

I. Development of Multiplication Table. IN every arithmetical process, the result is greater, less than, or equal to the number with which the process began. In the first case there is simply addition to, or excess of addition to over subtraction from, the original number. In the second case, a simple subtraction from, or excess of subtraction from over addition to that number. In the third case, an addition and a subtraction which cancel each other. Every possible step in arithmetic, then, is essentially an addition or a subtraction. These, therefore, are the only true genera of processes in numbers, and a proper classification of the subject must reduce every arithmetical operation to a species, or variety under a species, of one or other of these genera.

Here, too, simplicity in the philosophic sense is in fullest harmony with simplicity in the educational sense. Indeed, it is manifest that species and varieties can in this case be intelligently reached only through the comprehension of the genera. Whence the conclusion that addition and subtraction in their simplest forms and as usually understood, should be taught before "simple" multiplication (the single species of addition) and "simple" division (the single species of subtraction) are introduced at all.

Of course, at the outset and for a considerable time, only the simplest examples even of addition and subtraction should be introduced, and care should be taken to give to each step sufficient time and attention to secure its full and clear comprehension by the child. As soon, however, as the processes of addition and subtraction, as such, are fairly understood,* cases should be introduced

where the additive or the subtractive numbers are the same throughout: as, 1 plus 1=2; 1 plus 1 plus 1=3; 2 plus 2=4; 2 plus 2 plus 2=6; 2 plus 2 plus 2 plus 2=8; 2 plus 2 plus 2 plus 2 plus 2=10. The child is thus led to see that 2 taken twice is equal to 4; taken three times is equal to 6, etc., and when shown that the sign "x" is taken to mean "times," he can with ease be led to intelligently reduce the above examples to the form: $2 \times 2 = 4$; $3 \times 2 = 6$; $4 \times 2 = 8$; $5 \times 2 = 10$, and so on to the construction of the entire multiplication table.† Indeed, once in possession of the clue, children go on and work out independently all the remaining columns of the (ordinary) table. As, however, all the combinations within the limit of ten were gone over as cases of addition (and of subtraction) before the transition to the form of multiplication was made, so while this transition within the limit named is being effected, the combinations by means of simple addition and subtraction should be extended to the limit of fifteen, or at most twenty; and thus throughout, the construction of the multiplication table within any given limit should be preceded by thorough drill in addition and subtraction within that limit.

By this method the child sees clearly the necessary connection between the process of multiplication and that of addition; his interest is awakened, and he will scarcely fail to master the table in far less time and with far better intellectual results than if he commit it to memory in the ordinary way, without reference to or knowledge of its (logical) origin.

II. Limit of Multiplication Table.

No one needs to be told that 12×12 is not the absolute limit of this table. Every one must indeed recognize, the moment his attention is called to the fact, that the table has absolutely no limit whatever. On the other hand, no one seems to have called in question the limit (12×12) to the ordinary working section of the table, or to have observed that this limit is as purely arbitrary as that of a million times a million would be. Now, our system of notation being decimal, we have nine and but nine (significant) digits. Our multiplication table must then be carried to 9×9 and *need not be carried further*. All possible arithmetical multiplications can be, and in practice almost invariably are, carried out within this limit of the table. In short, here is a limit not arbitrary, but rational; and it is the only rational limit that can be assigned.

True, there is one reason for carrying the table to 12×12 (or rather to 12×9), namely, that we sometimes wish to multiply numbers by 12, and it would be convenient to use this as a simple multiplier, thus avoiding the addition of partial products; but we are just as likely to want to multiply numbers by 999; and, as the labor of adding the partial products in this case is much greater than when the

multiplier is 12, so (consistently) much more ought the table to be carried to 999×999 ! Further, most teachers who have led classes through the several steps of multiplication must have observed that the use of 10, 11, and 12 as simple multipliers, is a source of confusion when the pupils afterward undertake to multiply by the digits of the several orders of larger multipliers. There is therefore no real advantage gained in committing to memory the table beyond the limit 9×9 , and the time spent upon it above that limit is wasted—not to say worse than wasted.

W.M. M. BRYANT.

TENNESSEE.

Editors Journal:

I DO not know your faces, but I do know that you are strong advocates of universal education, and that you are laboring earnestly and successfully to bring about a better and a more efficient system of public education.

I am so well pleased with the JOURNAL that I shall spare no effort in presenting its merits to our teachers and directors. There is an article in the October number which alone is worth the subscription price for a year, viz: "Schools or Jails." I occasionally read this to some of our tax-payers, and find it does no little good in advancing the idea of taxation for common schools. It would do great good to have this article read in every school district in the land.

Our public school system is gaining ground and making friends every day in Greene county. Public sentiment has changed greatly within the last year, and the great demand is, good common schools. This demand is being supplied. The public schools are being taught with much more efficiency this year than last. The directors and parents are taking more interest, visiting the schools, and watching the progress of the pupils, and of course our teachers are doing more and better work under this stimulus than ever before.

E. M. WRIGHT.

GERENE COUNTY, East Tenn., 1875.

PARENTS, at this season of the year, will save themselves much trouble, and their children a great deal of suffering, by giving a little attention to the matter of their clothing. A little pains taken to see that children are suitably clothed to meet the exigencies of the season, will save many a child's life which may otherwise fall a victim to diphtheria, or some other possibly preventable disease. Teachers, too, are not without responsibility in the matter, more particularly in guarding against the exposure which children thoughtlessly subject themselves to while under their charge, and for themselves also, they will do wisely if they will patronize warm clothing and thick shoes more.

ALL matter for this journal must be in our hands by the 15th of the month previous to publication.

* This point may be gained through combinations within the number ten, no higher number being used, even as result.

† Division should be developed from subtraction in the same way.

THE STATES.

MISSOURI.—The State Teachers' Association will meet at Mexico, Dec. 28, 29, and 30.

The school fund of \$1,780,300 invested in United States bonds, has been converted into State bonds. This change increases the school fund \$239,000, and the annual income \$14,340.

The County Commissioners hold a convention at Mexico, Dec. 29.

The Teachers' Institute is still alive in Clay county. At the annual session held at Gilead Church, over 40 teachers were in attendance, and the exercises were interesting and profitable. Hon. D. C. Allen of Liberty, and Prof. A. J. Emerson of Wm. Jewell College, delivered able and eloquent addresses in defense of the public school system. Prof. A. B. Jones of Clay Seminary, delivered a very entertaining and instructive address upon the elements of success in the teacher. The citizens of this intelligent and public spirited community, by their presence and lavish hospitality, made the occasion one of especial enjoyment to the labor-worn teachers. GEO. HUGHES, Co. Com.

The Louisiana schools have 14 teachers and 818 pupils. The "Riverside Press" says: "The success of our schools speaks volumes in praise of Supt. J. M. White. Without intending flattery, we may confidently say, at no time in the past history of the Louisiana public schools, have they been in a more flourishing condition or attained to a higher degree of efficiency.

The New London school has 175 pupils and four teachers. B. F. Hardin, Principal, and W. E. Tompkins, First Assistant, give the highest satisfaction. The schools of Ralls county generally are far from being in a satisfactory condition.

The three Missouri State Normal Schools are remarkably successful. The attendance in the Normal departments is as follows: Kirksville, 415, Warrensburg 273, and Cape Girardeau 175.

The thirteenth annual session of the State Teachers' Association will be held at Mexico on the 28th, 29th and 30th days of December, 1875. Arrangements for free return tickets on the railroads, for reduced rates at the hotels, and for free entertainment of ladies, will be made.

PROGRAMME.

Tuesday, December 28.

7 P. M.—Organization. Address of welcome, Pres. A. W. Terrill. Educational Wants of Missouri, Prof. S. M. Dickey.

Wednesday, Dec. 29.

9 A. M.—Utility of the Classics, Prof. H. M. Hamill. The Teacher's Work, Prof. W. P. Nason. Discussions and Miscellaneous Business.

2 P. M.—, Pres. M. M. Fisher. Increased Efficiency of Public Schools, Prof. J. S. Crosby. Discussions.

7 P. M.—Address, Prof. John H. Tice.

Thursday, December 30.

9 A. M.—Report of Business Committee. —, Miss Hattie A. Comings. Course of Study for High Schools, Hon. W. T. Harris, et al. 'been a remarkable success.

The Teacher and the Educator, Pres. O. Root. Discussions and Miscellaneous Business.

2 P. M.—Address, Hon. R. D. Shannon. Manners in the School-room, Prof. S. S. Hamill. Reports of Committees, Election, etc.

7 P. M.—Art in Education, Prof. Ives.

The citizens of Mexico will give the teachers of the State a hearty welcome. It is the determination to make this the most profitable and pleasant session ever held in the State.

J. M. GREENWOOD,
Pres. M. S. T. Association.

L. D. McPHERSON, County Commissioner of Jasper county, Missouri, writes that a large number of township teachers' institutes have been formed in that county, and that there is an increased interest on the part of the people in the work teachers are doing in the schools. Teachers, of course, are more interested, and more efficient for this interest on the part of the people, and the schools are making steady progress. This ought to be the result in every county in the State.

CALIFORNIA.—Of 171,000 children of school age, 116,000 entered the public schools during the past year. The average attendance was 77,000. The public schools are rapidly absorbing private schools.

J. S. McPhail writes from Porterville: "A. R. Orr and myself are teaching here at \$100 per month. We expect positions next year at \$150 per month. We like California, but feel that we ought to be at work in Missouri. Whenever we can secure good situations we will gladly return.

PROF. PUTNAM, Supt. of Schools of Colusa county, is drawing from all sources the best teachers he can lay his hands upon, and a system of teaching and work has been inaugurated there which brings to pupils and parents the very best results. Steady progress is made, all are interested, and teachers are paid promptly and liberally.

IOWA.—The schools throughout the State are in a most prosperous condition. The higher institutions have, almost without exception, a larger attendance than ever before. The teachers of the public schools, fresh from the normal institutes, are infusing new life into the schools. Iowa seems destined to lead in the educational work.

CHEERING WORDS.—We can only give samples of many cheering letters from almost every State. The writers have our warmest thanks:

INDEPENDENCE, Iowa, Nov. 18, 1875.

The AMERICAN JOURNAL OF EDUCATION for November is received, and I am very much pleased with it. I like this journal better and better, both in its letter and its spirit. Of all the educational journals received, I place this among the very best. I desire to see it have a wide circulation among our teachers. AMOS ROW,

Supt. Buchanan county, Iowa.

ILLINOIS.—Dr. Richard Edwards, who has been president of the Bloomington, Ill., Normal University for fourteen years, has resigned, and will devote himself to the ministry. Under his management the school has been a remarkable success.

BOOK NOTICES.

TOWNSEND'S SHORT COURSE IN CIVIL GOVERNMENT. Ivison, Blakeman, Taylor & Co., New York. For sale by Gray, Baker & Co., St. Louis.

The wise teacher connects, as far as possible, real life and school life. To train for citizenship is a leading object of school education. Mr. Townsend has given us a book that will greatly aid teachers of every grade. It is worthy of unlimited commendation. If he cannot place it in the hands of his pupils, let the teacher use it and give a short oral lesson to his school daily. This book is a *guide* for the teacher as well as a compend for the student.

THE JOURNAL OF EDUCATION, \$2 50 a year: Brooklyn, New York. The eight numbers of this monthly received, are valuable documents for all teachers, but especially for professional teachers. The subjects discussed are timely, and their treatment exhaustive. We cordially welcome and commend this new educational enterprise.

SCRIBNER is about all that could be desired for a family magazine, pure in tone, strong for the highest and truest citizenship, it is drawing to itself the most brilliant writers of the nation. Terms, \$4 00 per year. Scribner, Armstrong & Co., New York.

ST. NICHOLAS has grown better and better with each succeeding issue of 1875, and has just now entered upon a new volume, promising more than ever before. It is the children's magazine of the age. The December number contains an admirable article, entitled: "One Hundred Christmas Presents, and How to Make Them." This article is full of practical descriptions, by the aid of which girls of all ages, and boys too, for that matter, can make beautiful and useful Christmas Presents for all their friends and relations. Scribner, Armstrong & Co., New York.

THE POET LONGFELLOW.—We have received from the publishers of the "Atlantic Monthly," H. O. Houghton & Co., Cambridge, a new life-size portrait of the poet Longfellow, which we consider not only a remarkable likeness, but a picture of unusual artistic excellence, having all the softness and finish of the finest crayon drawing. It can be had only by subscribers to "The Atlantic Monthly," to whom it will be sent, with the magazine for 1876, for \$5 00. The subscription price of the "Atlantic" alone is \$4 00.

The artist, Mr. J. E. Baker, has already won an enviable reputation, and the ever increasing circle of friends and readers of the poet, will be glad to get this luminous picture of their favorite author.

THE GALAXY for November has only one continued story, "Dear Lady Dindain," by Justin McCarthy. "Leah," by Mrs. Edwards, is in this number brought to a close. Noticeable among the rest of its contents are "The London Marriage Market," "Through Utah," "The Battle of Chickamauga," being a criticism on the accuracy of a statement in General Sherman's memoirs, "Weather Wisdom," and "Nannette Schiller," an interesting sketch of the poet's sister. Grant White writes on "Heterophemy," and his article may be simmered down to "Why do people unintentionally say what they do not mean?" The scientific miscellany is, as usual, good.

THE RURAL TEXAN, price \$2 00, and this journal, price \$1 60, \$3 60, will be sent one year, postage paid, for \$2 50. Both these papers at this price, should have a largely increased circulation. Send on the names and the money, \$2 50.

EDUCATIONAL DOCUMENTS.

We determined, some time since, to issue a series of "tracts," or documents, in cheap form, in conformity with the earnest solicitation of many of the leading educators from different parts of the country, which should embody some of the most practical ideas, and the freshest thought and expression of the age on this subject. These documents are for circulation among the people, so that they may be better informed not only of the work done by the teacher, but the necessity of this work. Teachers and school officers have found them to be profitable and interesting reading, and orders have been received for them from almost every State in the Union.

So far, fourteen of these separate tracts have been issued. Massachusetts and Texas ordered them by the thousand; Colorado and Maine send for them. They cost \$7 00 per hundred, or 7 cents for single copies. (Send postage).

The "Popular Educational Documents" issued thus far, cover the following interesting and practical topics:

No. 1. WHAT SHALL WE STUDY? By Wm. T. Harris, Superintendent of Public Schools of St. Louis.

No. 2. THE THEORY OF AMERICAN EDUCATION. By Wm. T. Harris, Superintendent of Public Schools of St. Louis.

No. 3. HOW NOT TO DO IT; Illustrated in the Art of Questioning. By Anna C. Brackett, Principal Normal School, Saint Louis.

No. 4. WOMEN AS TEACHERS. By Grace C. Bibb.

No. 5. AN ORATION ON THE OCCASION OF LAYING THE CORNER-STONE OF THE NORMAL SCHOOL AT WARRENSBURG, JOHNSON COUNTY, MISSOURI. By Thomas E. Garrett, Editor of Missouri Republican, and M. W. Grand Master of Masons of Missouri.

No. 6. HOW TO TEACH GEOGRAPHY. By Mrs. Mary Howe Smith. Read before the National Teachers' Association.

No. 7. HOW TO TEACH NATURAL SCIENCE IN THE DISTRICT SCHOOLS. By Wm. T. Harris.

No. 8. THE EARLY WITHDRAWAL OF PUPILS FROM SCHOOL—ITS CAUSES AND REMEDIES. An Essay read by William T. Harris, at the National Educational Association, in Boston.

No. 9. THE RIGHT AND THE POWER OF THE STATE TO TAX THE PROPERTY OF THE STATE TO MAINTAIN PUBLIC SCHOOLS. By Hon. H. C. Brockmeyer.

No. 10. HOW FAR MAY THE STATE PROVIDE FOR THE EDUCATION OF HER CHILDREN AT PUBLIC COST? An Essay by Wm. T. Harris, before the National Educational Association, at St. Louis.

No. 11. MODEL REVIEW EXERCISE IN ARITHMETIC.

No. 12. WOMAN'S WORK AND EDUCATION IN AMERICA. An Essay, by W. G. Eliot, D. D. Read before the State Teachers' Association.

No. 13. SYNOPSIS OF COURSE OF STUDY IN THE DISTRICT SCHOOLS. By William T. Harris.

No. 14. SYLLABUS OF LESSONS IN NATURAL SCIENCE. By Wm. T. Harris.

No. 15. GERMAN REFORM IN AMERICAN EDUCATION. An Essay read before the German American Teachers' Association By W. T. Harris.

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Those desiring teachers are requested to state—
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Teachers desiring positions will also state—
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3. What wages they expect per month.

We charge each applicant for a position, and each person applying for a teacher, the sum of *two dollars in advance*, for inserting their application.

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When in want of a nice coat, pants or vest, ready made or made to order, that J. Van Nostrand, Merchant Tailor, Furniture and Ready-made Clothing Dealer, will give you a splendid stock to select from, good goods, and at prices that will pay you to call and buy of him if you are in want of anything in his line.

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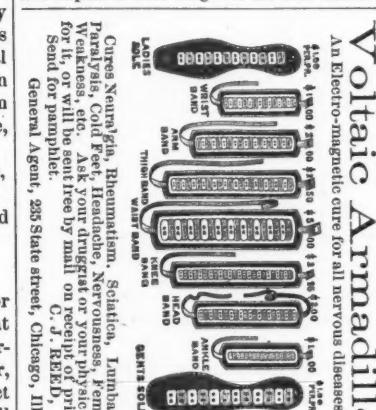
The Ohio and Mississippi Railway Co. will inaugurate a reduced local tariff from March 1st, 1875, which upon examination proves to be the lowest rates for passenger traffic in existence in the West, and is in accordance with the liberal ideas entertained and acted upon by its managers since they came into possession of this great highway between the West and the East. In 1871 the passenger tariff was reduced from an arbitrary rate of five cents per mile to four (equivalent to a reduction of 20 per cent), and in addition, a system of round trip tickets between all stations was introduced at three cents per mile (equivalent to a reduction of 40 per cent).

The results of this highly important and very liberal step for the benefit of its patrons disagrees with the predictions of those unfriendly to the move, as the steady increase in the number of passengers carried and earnings on the local business since has been sufficient to encourage the company to make the still further reduction referred to above, believing they will be justified in so doing by increased patronage and the hearty support of all who may have occasion to use this deservedly popular line.

From above date the basis for single trip tickets will be three cents per mile, and for round trip tickets two and three-quarters cents per mile—good until used. Freight train orders good for train and day only, will be sold at two and one-half cents per mile.

This is the first instance where a western road has had the courage to reduce to a figure which heretofore has been considered low and below a paying basis for railroad managers.

It is confidently expected that this reduction will help the freight business of the company by giving farmers and others inducements to travel, and dispose of their freight at the best market.



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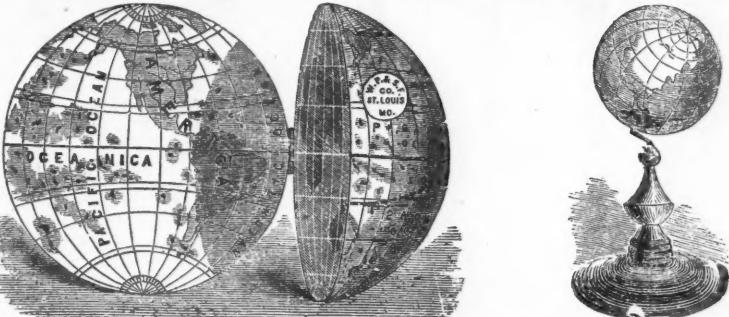
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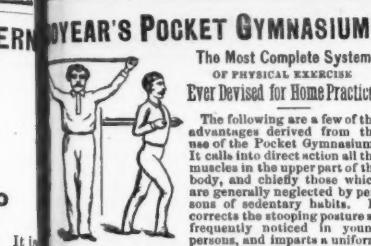
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A. S. JOHNSON,

ACTING LAND COMMISSIONER,

Topeka, Kansas.

EVERYTHING FOR SCHOOLS.

Address, with stamp for reply,

J. B. MERWIN,

Dealer in school supplies of all kinds.

11 North Seventh street, St. Louis, Mo.

FALL, 1875.

To the Trade Dealing in

SCHOOL BOOKS, STATIONERY

&c., &c.

The undersigned most respectfully informs the Trade that he has greatly increased his facilities, (having bought out the city School and entire Miscellaneous Book Business of Tavel, Eastman & Howell), and made other very considerable additions for the general supply of goods in his line, which embraces School and Miscellaneous Books of every description, Blank Books, Writing and Wrapping Papers, Envelopes, Ink, Pencils, Gold Pens, and every conceivable variety of Stationery and School Supplies. And having arranged to offer special advantages to buyers, solicits a continuance of favors from his old friends and orders from the Trade at large.

Books and other articles ordered, if not in stock, will be obtained if in the city, and sold at the lowest prices at which they can be bought.

Goods wanted, if not to be found in the city, will be ordered and sent with the least possible delay, this will be done in all cases, unless otherwise instructed.

Orders filled as promptly, completely, and at as low rates as any house in the South or West. Buying directly from the manufacturers, and being content to sell close for cash, the Trade can rely on touching bottom by purchasing from this house.

Customers having unsalable school books (dead stock) on hand, wishing to exchange them for other goods, will please send list, giving number of each kind—title of book in full—year published—name of publisher—when entered—and the edition (whether first, second or third, etc.). No exact offer can be made until books are first inspected, but the range of discount varies from forty to sixty per cent. on this class of goods.

TERMS—Cash, or settlement on the first of every month. Parties making the latter arrangement please send city references. Orders received and filled on this basis only.

The following catalogues have been issued and will be sent on application. In ordering please specify the particular catalogue wanted:

Stationery Price List free.
Price List Printers' Supplies free.
" Blank Books free.
Catalogue Globes and School Apparatus 10cts
Catalogue Optical and Mathematical Instruments 10cts
Catalogue Civil Engineers' Findings and Artists' Material, etc. 10cts
Catalogue School Books free.
Catalogue Law Books free.
Catalogue Medical Books free.
Catalogue Agricultural Books free.

Any book published in the United States or Europe can be supplied on short notice.

A. SETLIFF,

108 Church st., Nashville, Tenn.

Facts for Advertisers.

OFFICE OF



VOL. VIII.

EIGHT EDITIONS of the AMERICAN JOURNAL OF EDUCATION are now published each month. It has a larger circulation, and reaches more intelligent and enterprising people, than any similar publication in this country. An edition is published

In ST. LOUIS for Missouri,
In CHICAGO for Illinois and Wisconsin,
In TOPEKA for Kansas and Colorado,
In HOUSTON for Texas,
In MONROE for Louisiana,
In KIRKSVILLE for Iowa and Northern Missouri.
In SPRINGFIELD for Southwest Missouri and Arkansas.
In NASHVILLE for Tennessee.

Advertisers get the benefit of all this circulation, as advertisements go into ALL the editions. Advertisements in this journal are permanent—as we publish in each issue cuts and plans of school houses for both city and country—and the papers are preserved for these plans and specifications. The pages, too, are of such a size that advertisements are easily seen. This journal thus reaches merchants and farmers who are school directors, families, teachers, agents—more than 200,000 of the men and women of intelligence and enterprise in all sections of the country.

The following are our regular rates:

Nonpareil space, basis of measurement, 12 lines to the inch.	40c per line.
Outside page, front cover,35c per line.
Outside page, back cover,30c per line.
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Special Notices	
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HOLBROOK'S IMPROVED LIQUID SLATING, FOR BLACKBOARDS.

Directions for Use.

FIRST—Make the surface on which the Slating is to be applied as smooth as possible. Use sand or emery paper if necessary. It can be made perfect by filling any indentures with plaster of Paris, taking pains not to let the plaster set before it is put in, as it will crumble.

SECOND—For applying the Slating use a flat camel's hair brush, from three to fifteen inches wide—the wider the better.

THIRD—Shake and stir the Slating till thoroughly mixed; and, that the surface may be even, in applying the Slating take as few strokes as possible, drawing the brush the entire width of the board, as it hardens quickly, and any lappings of the brush are visible after the slating is dry.

FOURTH—After the first coat, rub the boards smooth with emery or sand-paper (rubbing the grit from off the paper first), and then apply the second coat same as first. For re-painting an old Blackboard two coats will be sufficient. If applied to the wall, three coats.

Caution—No one has authority to advertise "Holbrook's Liquid Slating," as we have the exclusive manufacturing of it throughout the United States. Dwight Holbrook, the inventor, made the first liquid slating ever offered for sale, and though there are several imitations, none can produce the

Smooth, Enduring, Dead-black Surface of the Holbrook.

It is the only surface that will not glaze.

N. B.—Thousands of testimonials like the following, received in proof of superiority of this article. James P. Slade, County Superintendent of St. Clair County, Ills., says: "Nearly two years since, for the purpose of testing several of the various articles used in the making of Blackboard surface, five or six different preparations were used in repairing our boards and making new Blackboard surface; and, now that sufficient time has elapsed to enable me to judge of their merits, I have no hesitation in saying that Holbrook's Slating is by far the best. It does not become glossy, crack or scale off. I can further affirm that it does improve, as you claim it will, by use. Of all the preparations thus tested, yours has given, and continues to give, entire satisfaction. For this reason I shall take pleasure in recommending it as I may have opportunity."

J. P. SLADE.

It will Last Ten Years.

Keep the can well corked. A gallon will cover about 250 square feet. Brushes furnished if desired. Sample as applied to paper sent by mail on application. Send for circular of Blackboard Erasers, and everything else needed in your school. Address, with stamp for reply,

J. B. MERWIN,
No. 11 North Seventh street, St. Louis, Mo.

CHARLES MORITZ,

BOOK BINDER,

AND

Blank Book Manufacturer,

NO. 302 MAIN STREET,

(Northeast corner of Olive.)

Blank books of every description made to order. Paper ruled with neatness and dispatch.

BOOK AND JOB PRINTING.

Done in the Best Style of the Art and at Reasonable Rates. Orders Solicited. Send for estimates on Catalogues and Pamphlet work before contracting elsewhere. Visiting Cards sent by mail, postage, 75 for \$1.00

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